

Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

REMARKS

Applicants have carefully studied the Office Action. This paper is intended to be fully responsive to all points of rejection and objection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

Status of the Claims

Claims 1-28 are pending in the Application. Claims 1, 9, 15, 17 and 21 have been amended.

Voluntary Amendment of Claims

Applicants have amended claims 1, 9, 15, 17 and 21 to more clearly define what the Applicants regard as the invention. No new matter has been added.

Specifically, claims 1, 9, 17 and 21 have been amended to clarify that the misaligned data access is detected during translation of a code block from a first format suitable for a first computing platform to a second format suitable for a second computing platform.

Claim 15 has been amended to conclude with a period.

Claim Objections

The Office Action objected to claim 15 because claim 15 does not conclude with a period.

Claim 15 has been amended to conclude with a period.

In view of the above, Applicants respectfully request that the objection to claim 15 be withdrawn.

Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

Claim Rejections Under 35 USC §102(b)

The Office Action rejected claims 1-7, 9-15, 21-26 and 28 under 35 USC §102(b) as being anticipated by Hohensee et al., United States Patent Number 6,064,815 ("Hohensee").

Applicants respectfully submit that in view of the foregoing amendment, the rejection of claims 1-7, 9-15, 21-26 and 28 under 35 USC §102(b) as being anticipated by Hohensee should be withdrawn.

As is well established, in order for a claim to be anticipated by the prior art, each and every element and feature of the claim must be included in a single prior art document.

Each of amended independent claims 1, 9 and 21 recites in paraphrase, *inter alia*, detection of misaligned data access during translation of a code block from a first format suitable for a first computing platform to a second format suitable for a second computing platform. Hohensee does not disclose, teach or suggest at least this feature of amended independent claims 1, 9 and 21. Therefore, Hohensee does not anticipate independent claims 1, 9 and 21, as amended.

Hohensee describes "an arrangement which enables the host microprocessor 11 while processing in an execution environment 30 a 'translated' program 31 which is generated by a translation program 32" (Hohensee, column 8, lines 34-37). Hohensee further describes that "the host microprocessor 11, when it first encounters a memory access instruction in the translated program 31, that includes a non-aligned memory reference, first calls an exception handler 36 to handle the exception and effectively emulate the memory access instruction" (Hohensee, column 8, lines 45-49).

Therefore, Hohensee describes a system wherein, at a first phase, an "original program 33" is translated into a "translated program 31"; and at a second phase, the microprocessor 11 executes the translated program 31, encounters a non-aligned memory reference, and calls an exception handler 36 to handle the exception. The system of Hohensee translates the original program 33 into the translated program 31 and does not detect misaligned data access during the translation phase.

Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

In contrast, each of amended independent claims 1, 9 and 21 recites in paraphrase, *inter alia*, detection of misaligned data access during the translation of a code block from a first format suitable for a first computing platform to a second format suitable for a second computing platform.

In view of the above, Applicants respectfully submit that each of amended independent claims 1, 9 and 21 meets the novelty requirements of 35 USC §102(b).

Applicants respectfully submit that the above-mentioned distinctions of amended independent claims 1, 9 and 21 would not have been obvious at the time the invention was made to a person having ordinary skill in the art, in view of any of the references on record, alone or in combination. Therefore, while the Examiner has not made such a rejection, Applicants respectfully submit that amended independent claims 1, 9 and 21 meet the patentability requirements of 35 USC §103.

Claims 2-6, claims 10-15, and claims 22-26 and 28 are dependent from amended independent claims 1, 9 and 21, respectively, and include all the features of these independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the novelty and patentability of claims 2-6, claims 10-15, and claims 22-26 and 28 follow directly from the novelty and patentability of amended independent claims 1, 9 and 21, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 1-7, 9-15, 21-26 and 28 under 35 USC §102(b) as being anticipated by Hohensee be withdrawn.

Claim Rejections Under 35 USC §103(a)

The Office Action rejected claims 8 and 16-20 under 35 USC §103(a) as being unpatentable over Hohensee.

Applicants respectfully submit that in view of the foregoing amendment, the rejection of claims 8 and 16-20 under 35 USC §103(a) as being unpatentable over Hohensee should be withdrawn.

Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

Each of amended independent claims 1, 9 and 17 recites in paraphrase, *inter alia*, detection of misaligned data access during translation of a code block from a first format suitable for a first computing platform to a second format suitable for a second computing platform. Hohensee does not disclose, teach or suggest at least this feature of amended independent claims 1, 9 and 17. Therefore, Hohensee does not render amended independent claims 1, 9 and 17 obvious.

Claim 8, claim 16 and claims 18-20 are dependent from amended independent claims 1, 9 and 17, respectively, and include all the features of these amended independent claims as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claim 8, claim 16 and claims 18-20 follows directly from the patentability of amended independent claims 1, 9 and 17, respectively.

In view of the above, Applicants respectfully request that the rejection of claims 8 and 16-20 under 35 USC §103(a) as being unpatentable over Hohensee be withdrawn.

The Office Action rejected claims 7-12 and 19-21 under 35 USC §103(a) as being unpatentable over Hohensee in view of Paul Drongowski, "Performance Tips for Alpha Linux C Programmers" ("Drongowski").

According to M.P.E.P. §2142, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Without conceding the appropriateness of the combination, and without conceding that the combination renders claim 27 obvious, Applicants respectfully submit that in view of the foregoing amendment, the rejection of claim 27 under 35 USC §103(a) as being unpatentable over Hohensee in view of Drongowski should be withdrawn.

Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

Independent claim 21 recites in paraphrase, *inter alia*, detection of misaligned data access during translation of a code block from a first format suitable for a first computing platform to a second format suitable for a second computing platform. Hohensee and/or Drongowski, alone or in combination, do not disclose, teach or suggest at least these features of amended independent claim 21. Therefore, Hohensee and/or Drongowski, alone or in combination, do not render amended independent claim 21 obvious.

Drongowski describes that “The Compaq C compiler assumes, as a default, that data items are aligned and generates fast code for memory access. The compiler can be forced to assume misaligned data objects” (Drongowski, section 2.7).

Clearly, the compiler of Drongowski does not perform detection of data misalignment, and does not perform detection of data misalignment during translation of a code block, as recited in independent claim 21. At most, the compiler of Drongowski may operate either in a mode in which the compiler assumes that data items are aligned, or in a mode in which the compiler is forced to assume that data items are misaligned.

Claim 27 is dependent from amended independent claim 21, and includes all the features of amended independent claim 21 as well as additional distinguishing features. Therefore, it is respectfully submitted that the patentability of claim 27 follows directly from the patentability of amended independent claim 21, respectively.

In view of the above, Applicants respectfully request that the rejection of claim 27 under 35 USC §103(a) as being unpatentable over Hohensee in view of Drongowski be withdrawn.

Conclusion

In view of the foregoing amendment and remarks, and for at least the reasons discussed above, Applicants respectfully submit that claims 1-29 are deemed to be allowable. Their favorable reconsideration and allowance are respectfully requested.

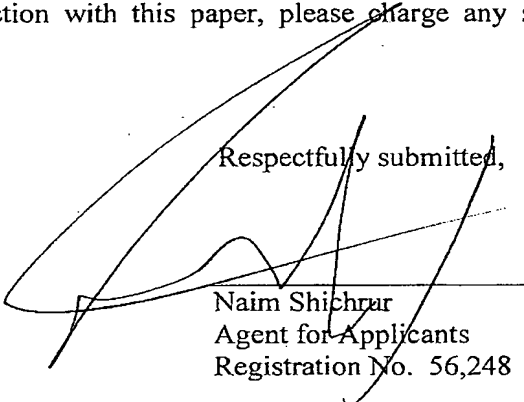
Applicants: DEVOR, Harold T. et al.
Serial No.: 10/721,879

Attorney Docket No.: P-6216-US
Assignee: Intel Corporation

Should the Examiner have any question or comment as to the form, content or entry of this paper, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

No fees are believed to be due in connection with this paper. However, if any fees are in fact due in connection with this paper, please charge any such fees to deposit account No. 50-3355.

Respectfully submitted,



Naim Shichrar
Agent for Applicants
Registration No. 56,248

Dated: May 24, 2006

Pearl Cohen Zedek Latzer, LLP
1500 Broadway, 12th Floor
New York, New York 10036
Tel: (646) 878-0800
Fax: (646) 878-0801